MENTALLY ILL OFFENDER

Program Evaluation Survey

This survey will become part of your county's MIO contract with the Board of Corrections. For purposes of this survey:

- "Program" refers to a defined set of interventions that will be given to a specified research sample
 in order to evaluate well-stated hypotheses. If you have more than one Program, please fill out a
 separate survey for each Program.
- "Research Design" refers to the procedures you will use to test the stated hypotheses for your Program. In some instances you will have more than one Research Design for a Program, in which case a separate survey must be completed for each Research Design.
- "Project" refers to all the work that you propose to do with the MIO Grant. For example, if you have two Programs and two Research Designs for each Program, the entire effort would constitute your Project (and you would complete four surveys).

To simplify the task of completing this survey, we refer you to two sources: 1) the initial Research Design Summary Form, and 2) your Program's responses to the technical compliance issues identified during the grant review. If no additional information was requested of a particular item on the Research Design Summary Form, you can enter the original text into the appropriate space below. If more information was requested, provide a more complete response.

1.	County: San Francisco					
1a.	Researcher: Barbara E. Havassy, Ph.D.	Phone: 415-597-9278				
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2. **Program Name:** Indicate the title you will be using to refer to your Program.

FORENSIC SUPPORT SYSTEM (FSS)

3. Treatment Interventions: Describe the components of the Program that you will be evaluating. Another way of saying this is, "Describe how the 'treatment' offenders (those in the Program) will be treated differently than the comparison offenders (e.g., services while incarcerated, more intensive supervision, more thorough assessment, a wider range of services, more aggressive case management, better aftercare)."

The Program is the Forensic Support System (FSS) and is a pilot demonstration project that creates a network of services for experimental subjects that may be accessed following assignment to the experimental group for the duration of the Program. It is comprised of the District Attorney's office, the Public Defender, the Superior Court, the Adult Probation Department, Jail Psychiatric Services (JPS), Jail Aftercare Services (JAS), and the Citywide Forensic Team (CFT). The FSS includes a JAS Psychiatric Liaison staff to the court system exclusively for FSS subjects. The Psychiatric Liaison will provide consultation to the court system on behalf of the FSS subjects. The cornerstone of FSS is the CFT. The CFT will be an intensive community-based case management team for FSS subjects that will coordinate and deliver a broad-range of community-based services. The CFT is a multidisciplinary team to provide case management and service delivery at a clinical site, and, most importantly, in the living milieu of the FSS subject. In addition to traditional individual and group counseling, the team will provide case management, money management, medication, and substance abuse treatment. The team will provide a range of socialization, skill building, recreational and pre-vocational services. Subjects will be able to access a case manager 24 hours per day. In the event of incarceration, hospitalization, crisis intervention and resolution, case managers will meet with staff of the receiving institution immediately to insure continuity of care and to provide support to the subject.

4. **Research Design:** Describe the Research Design that you will be using. Issues to be addressed here include the name of the design (e.g., true experimental design), the use of random assignment, and any special features that you will include in the design (e.g., the type of comparison group you will use for quasi-experimental designs).

TRUE EXPERIMENTAL DESIGN. Participants will be randomly assigned to the experimental intervention or to a comparison condition (treatment-as-usual).

4a. Check (✓) the statement below that best describes your Research Design. If you find that you need to check more than one statement (e.g., True experimental and Quasi-experimental), you are using more than one Research Design and will need to complete a separate copy of the survey for the other design. Also, check the statements that describe the comparisons you will be making as part of your Research Design.

R	Research Design (Check One)			
X	X True experimental with random assignment to treatment and comparison groups			
	Quasi-experimental with matched contemporaneous groups (treatment and comparison)			
	Quasi-experimental with matched historical group			
	Other (Specify)			
Comparisons (Check all that apply)				
	Post-Program, Single Assessment			
	Post-Program, Repeated Assessments (e.g., 6 and 12 months after program separation)			
	Pre-Post Assessment with Single Post-Program Assessment			
	Pre-Post Assessment with Repeated Post-Program Assessments (e.g., 6 and 12 months after			
	program separation)			

- Other (Specify) The comparisons involve baseline (study entry) assessment and repeated assessments for 18 months following jail release. Although subjects will be continued in the Program for the duration of the project (September 2003), the evaluation research period for each subject is 18 months following jail release.
 - 4b. If you are using a historical comparison group, describe how you will control for period and cohort effects.

N/A

5. Cost/Benefit Analysis: Indicate by checking "yes" or "no" whether you will be conducting a Program cost/benefit analysis that includes at least: a) the cost per participant of providing the interventions to the treatment and comparison groups; b) the cost savings to your county represented by the effectiveness of the treatment interventions; and, c) your assessment of the program's future (e.g., it will continue as is, be changed significantly, be dropped) given the results of the cost/benefit analysis.

Cost/Benefit Analysis			
	Yes X		No

5a. If you will perform a cost/benefit analysis, describe how that analysis will be performed.

The main elements of the economic analyses are criminal justice, mental health treatment, and drug treatment costs. Criminal justice (CJ) costs to be obtained will be expressed as average cost per jail day and average cost per arrest. Mental health (MH) treatment costs will be derived from services provided to research subjects by providers in the county mental health system and averaged per subject. Drug treatment (DT) costs will also be derived from services provided to research subjects from the county drug treatment system and averaged per subject. The Jail Psychiatric Services costs per service will be derived from their contract. All of these cost estimates will be from the most recent year available, therefore it is anticipated that the costs will be expressed in Year 2001 dollars

Estimates of MH, DT, and JPS-JAS costs for the experimental and the control groups will consist of two basic components: costs of services and costs of salaries.

- (1) **cost of services**: the costs of services that subjects received from San Francisco Division of Mental Health Services (DMHS), those received from San Francisco Community Substance Abuse Services (CSAS) and those received from JPS and JAS will be obtained from the respective billing systems. Each service from each of these systems provided to an experimental and control subject for the period being studied will be associated with a cost estimate.
- (2) **cost of providers' salaries**: the sum of salaries paid to the staff of the two experimental conditions for the period under study. For the experimental group, that sum consists of the sum of salaries of the CFT, JPS, JAS and the Adult Probation Department's Intensive Supervision staff who will be working with the experimental group, including the JAS Psychiatric Liaison staff. For the control group, that sum consists of the sum of salaries paid to the JPS and JAS staff who work with the control group to deliver the treatment-as-usual intervention.

There are two main analyses proposed. The first test of the hypothesis, that the experimental group will have generated 35% less CJ costs over the 18-months than the control group, will be an

aggregation and comparison of the costs. If data support it, these costs can be examined in 6-month aggregations, costs months 1-6, 7-12, 13-18. Independent of whether the 35% goal has been reached, the differences between the two groups will be tested for statistical significance.

The second test of the hypothesis will be to determine the ratio of CJ costs to MH and DT costs for the experimental and control group. The analyses will include MH and DT examined separately and also together (costs = MH + DT). Thus, we will obtain the number of CJ dollars spent for each MH dollar spent, the number of CJ dollars for each DT dollar spent and also for each MH + DT dollar spent. For example if the experimental group average MH treatment costs is \$74K per person for 18 months and the average CJ costs is \$227K per person for the same period, the ratio is \$227K (CJ) divided by \$74K (MH) or \$3.07. That is, for every MH dollar that was spent, a total of \$3.07 was spent in the CJ system. In contrast, suppose that the control group average MH treatment costs is \$56K per person and the CJ cost is \$312K, the ratio is \$312K (CJ) divided by \$56K (MH). For every MH dollar that was spent, \$5.57 was spent for CJ. The difference between \$3.07 and \$5.57 is \$2.50, and it translates to 45% less for the experimental group than the control group (2.50/5.57 = 45%). This difference will be tested for statistical significance.

6. Target Population: This refers to the criteria that treatment and comparison subjects must meet in order to be able to participate in the research. Target criteria might include diagnostic categories, age, gender, risk level, legal history, geographical area of residence, etc. Please provide a detailed description of the criteria you will be using and how you will measure those criteria to determine eligibility.

Target population consists of inmates of the San Francisco County Jail who are at risk for incarceration at state prisons. Inmates who are eligible to participate are those inmates who have been initially charged with a felony (excluding those charged with murder, arson, child sexual assaults, forcible sex offenses, or where charges included use of firearms, great bodily injury) and who have two prior local bookings since 1993 and who have been determined to be mentally ill. Criteria for mental illness for this project is having been diagnosed with an Axis I disorder (excluding adjustment disorders or substance use disorders without co-occurring Axis I disorders) or with the Axis II disorders of paranoid personality disorder, borderline personality disorder, schizotypal or schizoid personality disorder (all other Axis II disorders are excluded)).

6a. Describe any standardized instruments or procedures that will be used to determine eligibility for Program participation, and the eligibility criteria associated with each (e.g., "significant psychopathology" as measured by the MMPI, etc.).

N/A

7. **Sample Size**: This refers to the number of subjects who will participate in the treatment and comparison samples during the entire course of the research. Of course, in any applied research program, subjects drop out for various reasons (e.g., moving out of the county, failure to complete the program). In addition, there will probably be mentally ill offenders who participate in the Program you will be researching and not be part of the research sample (e.g., they may not meet one or more of the criteria for participation in the research), or they may enter into the Program too late for you to conduct the follow-up the research you intend to do. **Using the table below**, indicate the number of participants who will <u>complete</u> the treatment interventions or comparison group interventions, <u>plus</u> the minimum six months follow-up period after Program completion. This also will be the number of subjects that you will be including in your statistical hypothesis testing to

evaluate the Program outcomes. Provide a breakdown of the sample sizes for each of the four Program years, as well as the total Program. Under **Unit of Analysis**, check the box that best describes the unit of analysis you will be using in your design.

Sample Sizes (Write the expected number in each group)					
Program	Treatment Group		Comparison Group		
Year					
First Year	Please see text at the bottom of this		Please see text at the bottom of this		
	table.		table.		
Second Year					
Third Year					
Total	75		75		
Unit of Analysis (Check one)					
X Individual Offender		Fa	Family		
Institution	Institution Ge		Geographic Area (e.g., neighborhood)		
Other		Otl	Other:		

The plan is to fill the 75 experimental group treatment slots by randomizing 150 eligible inmates during months 3 of Year 01 through month 1 of Year 02 (a 10 month period). It is anticipated that over time 20% of the 75 (n = 15) will leave the treatment group (attrition from treatment). Anticipated causes for attrition are death, incarceration in state prison for a period longer than study participation period, and any movement out of San Francisco County such that they are no longer receiving services in San Francisco County. The procedure will be to compensate for attrition from the experimental group by replacing those subjects. Thus a total of 90 (75 + 15) will be randomized into the experimental group. Data will be collected on each of these 90 subjects, to the extent possible (see anticipated causes of attrition), as well as the reason for attrition.). The procedure for replacing experimental group subjects will be to randomly select a study-eligible inmate, as described earlier, who is in the last month of incarceration and then randomly assign that inmate to the experimental or control condition. Should the inmate be randomly assigned to the control condition, the process will continue until the assignment of an inmate to the experimental condition has been achieved. To the extent possible, the replacement procedure will be initiated when more than one replacement experimental subject is required, rather than go through the replacement procedure on a subject-by-subject basis.

8. Key Dates:

• "Program Operational" is the date that the first treatment subject will start in the Program.

December 1, 1999

• "Final Treatment Completion" is the date when the last treatment subject in the research sample will finish the interventions that constitute the Program (and before the start of the follow-up period).

June 30, 2003

• "Final Follow Up Data" is the date when the last follow-up data will be gathered on a research subject (e.g., six months after the last subject completes the treatment interventions or whenever these data will become available).

August 30, 2003

Matching Criteria: (Whether or not you are using a true experimental design), please indicate the
variables that you will be tracking to assess comparability between the groups. Matching criteria
might include: age, gender, ethnicity, socioeconomic status, criminal history mental health
diagnosis, etc.

As noted, a concern is whether comparability of the experimental and control groups has been achieved. The concern in this project is comparability on race, gender, and substance abuse/dependence. The majority of inmates are African-American men between 18 – 35 years, therefore it is important that Euro-American men, women (of any race-ethnic group), and those older than 35 years of age do not, by chance, predominate in either the experimental or control group. Also, because substance abuse and dependence are critical mitigators of criminal and psychosocial outcomes, it is important that this characteristic not predominate in one group by chance. Although the randomized-assignment procedure should assure that there are no significant differences between groups on these characteristics, the sample will be stratified on these variables and then randomly assigned from within strata.

9a. After each characteristic listed above, describe how it will be measured.

Race: From self-reported data during intake assessment, using US Census categories.

Gender: From jail housing location (male or female housing).

Age: From booking documentation.

Substance Use Status: From DSM IV checklist administered during intake assessment.

9b. Which of these characteristics, if unequally distributed between the treatment and comparison groups, would complicate or confound the tests of your hypotheses? How will you manage that problem?

See response to Item 9 above.

9c. If you are using an historical comparison group, describe how you will ensure comparability (in terms of target population and matching characteristics) between the groups.

N/A

10. Comparison Group: The intent here is to document the kind of comparison group you will using. If you are using a true experimental design, the comparison group will be randomly selected from the same subject pool as the treatment subjects (in which case you would enter "true experimental design" in the space below). However, for quasi-experimental designs, the comparison group might come from a number of different sources such as: matched institutions, matched geographical areas, other matched counties, a matched historical group, etc.

True experimental design.

Please identify the source of your comparison group.

N/A

11. **Assessment Process**: The intent here is to summarize the <u>assessment process that will determine</u> the nature of the interventions that the mentally ill offenders in the treatment group will receive. For example, psychological testing, multi-agency and/or multi-disciplinary assessments, etc. Also, describe the qualifications of those who will be doing the assessments.

Once assigned to the experimental group, subjects will receive an intake evaluation by CFT. In the intake evaluation, service needs will be identified as well as areas of subjects' strengths. CFT staff will be experienced masters-level clinicians and will perform their tasks under supervision.

11a.Describe any standardized assessment instruments that will be administered to all treatment group subjects for the purposes of <u>identifying appropriate interventions</u>.

N/A

11b.Describe any assessment instrument designed by your county that you will use.

N/A

11c.Identify which assessment instruments, if any, will also be administered to comparison group subjects.

None.

12. Treatment Group Eligibility: Indicate the process (as opposed to the criteria) by which research subjects will be selected into the pool from which treatment subjects will be chosen.

Jail Psychiatric Services (JPS) routinely evaluates all newly incarcerated inmates referred to it by Jail Health Services for the presence mental illness. This activity is usual treatment for all San Francisco County Jail inmates. Inmates who have been identified by JPS as meeting entrance criteria for FSS participation (both mental illness and criminal justice criteria, as described in Item 6,) will be referred to evaluation staff. Towards the end of their incarceration, eligible inmates will be approached by evaluation research staff and have the study explained to them. Those inmates who participate in the informed consent procedure and give consent to participate will be administered a study entry assessment administered by evaluation research staff. Subsequently, subjects will be randomly assigned to the experimental or the control group and referred to either CFT or JAS.

13. **Comparison Group Eligibility**: Indicate the process by which research subjects will be selected into the pool from which comparison subjects will be chosen. For true experimental designs, this process will be the same as for treatment subjects.

The design is a true experimental design. The comparison group consists of subjects who have been randomly assigned to the control group and are from the same pool as the experimental subjects.

13a.If procedures for determining the eligibility of participants for the Comparison Group differ from those described in 12, please describe them. If different procedures are used, how will you ensure comparability of the two groups in terms of critical characteristics?

N/A

Answer questions 14 - 17 by filling in the table below as instructed.

- 14. **Outcome Variables**: In the table below, list some of the most important outcome variables that you are hypothesizing will be positively affected by your Program. Possibilities include improvement in personal functioning, arrest rate, successful completion of probation, alcohol and drug-related behavior, risk classification, etc.
- 15. **Score/Scale**: To "measure" the effects produced by your Program requires putting the variable in question on some sort of measuring scale (e.g., a test score, a count of occurrences, a rating scale, a change-score indicating progress of some sort). For each variable, for which you are making a hypothesis, indicate in the table below the measurement that you will be statistically analyzing when you test your hypothesis.
- 16. **Additional Information**: To explain more fully how you intend to test your hypothesis, you might find it helpful to supply additional information. For example, you might intend to partition the data by gender, or make differential hypotheses for different age ranges. Supplying "additional information" is optional; but if there is some aspect of the hypotheses testing that is important for us to know about, please supply the information in this section.
- 16a. For each outcome variable that will <u>not</u> be measured by a standardized assessment procedure, describe the measurement procedures that will be used. For instance, if your county has developed a risk-assessment tool that you will be using to measure change, please describe how it works.
- 17. **Significance Test**: In order for a statistical procedure to be the appropriate test of a particular hypothesis, certain assumptions must be met. It is critical at the outset of a research design to make sure that the measuring devices, measuring scales, samples, and methodology produce the kind of data that fit the requirements of the intended statistical procedure. In this section, please list your choice for the testing of your hypothesis, given the research design you have chosen, the measurement you will use, and the data you will be collecting.

Variable	riable Score Additional Information /Scale		Significance Test
Number of jail days for 18 months following target jail release.	Count of occurrences	The hypothesis states that the experimental group will achieve 35% fewer jail days than the control group. To test for this difference, the mean for the 18-month follow-up (and standard deviation) for each group will be calculated. Depending on rate of occurrences, a mean for each group for each of three 6-month periods will be calculated. Additionally, the pre-post difference in jail days will be examined. Pre-data consists of the number of jail days accrued in the 18 months prior to the target jail episode and the post data consists of the number of jail days accrued in the 18-month follow-up period.	A simple calculation will reflect whether the experimental group mean is 35% less than the control group mean. This calculation will be performed on the 18-month mean and if meaningful, on the successive 6-month means. In order to examine changes over time, a repeated measures mixed model analysis of variance (ANOVA) will be conducted, with time, experimental group, and their interaction as factors. Should the distribution on jail days grossly differ from normal, the appropriate non-parametric tests will be conducted.
Number of arrests for 18 months following target jail release.	Count of occurrences	Hypothesis is same as stated above, that is, a 35% lower rate of arrests for the experimental group is predicted. Therefore, strategy will be same as that described above.	Strategy will be same as that described above.
Criminal justice system costs following target jail release.	Estimated cost per jail day and estimated cost per arrest	The focus of the analyses to test this hypothesis is to assess whether the provision and costs of mental health and drug treatment services to experimental subjects results in their incurring lower criminal justice costs that the control group.	The analyses to test this hypothesis are described in Items 5 and 5a.

The following questions are supplemental to the Research Design Summary Form and will help us understand how you intend to manage data collected for this project.

18. What additional background information (if any) will be collected for the participants (both treatment and comparison)? For instance, will you gather information about family criminal background, drug involvement, family variables, work history, educational background, etc. If so, what will be collected and how?

Data will be collected on a group of psychosocial variables thought to influence, or be related to, outcomes. Data on some of these variables will be self-reported and obtained from the study intake interview, conducted by evaluation research staff after provision of informed consent (before randomization). Other data will be collected from jail and clinical records and from the data information systems of the mental health, drug treatment and forensic services databases. Among the most important of these variables are psychopathy and antisocial characteristics; depressive symptoms: treatment readiness; quality of life; homelessness; drug use and treatment history

concerning psychiatric and drug abuse problems. Employment and educational history will also be obtained. Each of these variables is prominent in the treatment research literature as influencing outcomes.

19. How will the process evaluation be performed? What components will be addressed and how will they be measured (e.g., services available and frequency of use of those services by each participant)? What is the time frame for gathering process-related information? What recording mechanisms will be used? If descriptive or statistical analyses will be performed, please describe what they will be.

Implementation of the FSS will be documented. A complete description of FSS at the point of implementation (December 1, 1999) will be prepared. The documentation will include the implementation of each FSS component (District Attorney, Adult Probation, etc.,). The documentation will proceed over time, for the 4-year duration of the grant, and as elements and processes are modified, these also will be documented. The description of the FSS as it exists at the closure of the grant period will also be documented.

20. Describe how you will document services received by the treatment and comparison group members. Examples are: how many counseling sessions did the subject attend, how intense (and by what measure) was the drug treatment, did the subject complete the interventions, etc.?

Methodology developed by the evaluator team will allow them to obtain descriptive, quantitative, and cost data on all mental health and drug treatment services received. These data will be obtained from the billing information systems of DMHS and CSAS. The data will provide the intensity of the modality of the intervention (inpatient, crisis, acute, outpatient, day-treatment), the intensity of the intervention as measured by time (e.g., 15 minute counseling session, 5 inpatient days, half-day of day treatment) and the duration of the treatment episode.

21. What will be the criteria for completion of the program (by what criteria will you decide that the research subject has received the full measure of the treatment that is hypothesized to have a beneficial impact. For instance, will the Program run for a specified amount of time irrespective of the participants' improvement or lack thereof? If so, how long? Alternatively, will completion be determined by the participants' having achieved a particular outcome? If so, what will that outcome be and how will it be measured? An example is decreased risk as measured by a "level of functioning" instrument.

The Program will run until the end of the grant period. Each experimental subject will be provided services under FSS for the duration of the grant period. The period for which data will be collected for the evaluation will be for a period of 18 months, irrespective of subjects' improvement or lack thereof and whether experimental subjects avail themselves of the treatment available.

22. If Program completion will be linked to probation terms, how will you record those terms and identify adequate completion? Examples include completion of mental health or substance abuse programs, etc.

N/A

23. On what basis will a subject be terminated from the Program and be deemed to have failed to complete the Program? Will those who leave, drop out, fail, or are terminated from the Program be tracked in terms of the research dependent variables? For how long?

Experimental subjects will not be terminated from the Program and following the end of the grant period, it is expected that experimental subjects will be continued in the Program. It is anticipated that the Program will continue to function as a county program. The research design does not have a study-exit criterion of "failure to complete." As noted earlier, each experimental subject will be enrolled for the duration of the grant period and then continued as described above. Control subjects will remain in the control condition for 18 months. After the 4 year grant period has ended, should the County continue to operate the program, control subjects will have the option of entering the FSS and will be given priority over others seeking entrance to FSS.

Each subject, experimental and control, will be tracked in terms of outcome variables for 18 months from their entrance into the project.